

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Application of:	)	
	)	Confirmation No: <b>1268</b>
<b>Colin Andrew Low, et al.</b>	)	
	)	Group Art Unit: <b>3714</b>
Serial No.: <b>10/672,851</b>	)	
	)	Examiner: <b>Kang, Hu</b>
Filed: <b>September 26, 2003</b>	)	
	)	
For: <b>Two Mode Creature Simulation</b>	)	Atty. Docket No.: <b>30018433-3</b>

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

This Appeal Brief under 37 C.F.R. § 41.37 is submitted in support of the Notice of Appeal filed August 22, 2008, responding to the final Office Action mailed May 22, 2008.

It is not believed that extensions of time or fees are required to consider this Appeal Brief. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefor are hereby authorized to be charged to Deposit Account No. 08-2025.

### **I. Real Party in Interest**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

### **II. Related Appeals and Interferences**

There are no known related appeals or interferences that will affect or be affected by a decision in this Appeal.

### **III. Status of Claims**

Claims 1-11 stand finally rejected. The final rejections of claims 1-11 are appealed.

### **IV. Status of Amendments**

No claim amendments have been made subsequent to the final Office Action mailed May 22, 2008. The claims in the attached Claims Appendix (see below) reflect the present state of Applicants' claims.

## **V. Summary of Claimed Subject Matter**

The claimed inventions are summarized below with reference numerals and references to the written description ("specification") and drawings. The subject matter described in the following appears in the original disclosure at least where indicated, and may further appear in other places within the original disclosure.

Embodiments according to independent claim 1 describe a method of simulating the activities of a plurality of creatures. The method comprises simulating activities of the plurality of creatures at a first mode of simulation observable by a user, wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation. Applicants' specification, page 3, lines 8-16 and block 100 of Figure 1. The method further comprises simulating an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation. Applicants' specification, page 6, lines 4-15 and block 120 of Figure 1.

Embodiments according to independent claim 10 describe a recordable medium having recorded thereon computer readable code, wherein the computer readable code is adapted to simulate activities of a plurality of creatures at a first mode of simulation observable by a user. Applicants' specification, page 4, lines 22-23. The first mode of simulation is less detailed and less computationally intensive than a second mode of simulation. Applicants' specification, page 3, lines 8-16 and block 100 of Figure 1. The code is further adapted to simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at

the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment. Applicants' specification, page 6, lines 4-15 and block 120 of Figure 1.

Embodiments according to independent claim 11 describe a simulator device arranged to simulate activities of a plurality of creatures. Applicants' specification, page 4, lines 25-32. The device is arranged to utilise at least two modes of simulation. The two modes of simulation comprise a first mode of simulation arranged to simulate activities of the plurality of creatures observable by a user, wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation, Applicants' specification, page 3, lines 8-16 and block 100 of Figure 1; and a second mode of simulation arranged to simulate an activity of one of the plurality of creatures observable by the user, wherein results at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for a new change in environment. Applicants' specification, page 6, lines 4-15 and block 120 of Figure 1.

## **VI. Grounds of Rejection to be Reviewed on Appeal**

The following grounds of rejections are to be reviewed on appeal:

Claims 1-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Barba* ("The Sims Livin' Large Expansion Pack – Prima's Official Strategy Guide" by Rick Barba) in view of the Examiner's Official Notice.

## VII. Arguments

Claims 1-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Barba* in view of the Examiner's Official Notice. Applicants respectfully traverse this rejection.

### A. Applicants' Claims 1-9

As provided in independent claim 1, Applicants claim:

A method of simulating the activities of a plurality of creatures, the method comprising:

simulating activities of the plurality of creatures at a first mode of simulation observable by a user, ***wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation;*** and

***simulating an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment.***

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Barba* in view of the Examiner's Official Notice does not disclose, teach, or suggest at least "simulating an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment," as emphasized above.

Applicants respectfully fail to appreciate the differences in level of detail and computational intensity with respect to the screenshots for the Sims computer game

described in *Barda*. However, the Office Action issued September 12, 2007 contends that Fig. 7-17 as seen on page 130 of *Barda* shows the outside of a house simulation which is less detailed and less computationally intensive than figures showing the inside of the house as seen in Fig. 7-12 or Fig. 7-14 on pages 127-128. On this point, Applicants respectfully note that the house is not experiencing a change in environment or in response to a change, a simulation of an activity of the house is not performed at a higher level of detail and computational intensity. Further, *Barda* does not disclose that the results of the simulation of a higher level of detail are used to simulate the house at a lower level of detail for the new change in environment. Rather, *Barda* arguably shows an exterior of a house being shown at a low level of detail and an interior of the house being shown at a high level of detail.

The Office Action also mentions the existence of games such as *Starcraft* by Blizzard (released in February 28, 1998) and seems to take Official Notice that it is well known to simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment and wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation. Here, the games use a mini-map providing an overview of a location of space vehicle in relation to its distant surroundings, where a main display segment shows the space vehicle in relation to its immediate surroundings. The main display segment is allegedly shown in higher detail than the mini-map display. As such, *Starcraft* fails to use results from one mode of simulation to provide a simulation in

another mode, since both simulations run concurrently. Further, *Starcraft* shows a simulation of an object at a lower resolution in a distant view before the object is shown at a higher simulation in the main display segment. Therefore, even if results of one simulation depended on the other, in *Starcraft*, a result from a high-detailed simulation would not be used to produce a lower-detailed simulation.

Per MPEP 2144.03(A), "It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known." Also, per MPEP 2144.03(B), "If such notice is taken, the basis for such reasoning must be set forth explicitly. The Examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge." For at least the reasons stated above, it has not been shown that it is well known to simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment and wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation.

As specific factual findings predicated on sound technical and scientific reasoning in support of the conclusion of common knowledge are not provided in the Office Action, the Official Notice and the rejections based upon this finding should be withdrawn. Further, under 37 CFR § 1.104(d)(2), if the rejections are based on facts within the personal knowledge of the examiner, "the data should be stated as

specifically as possible, and the facts must be supported, when called for by the applicant, by an affidavit from the examiner. Such an affidavit is subject to contradiction or explanation by the affidavits of the applicant and other persons." Therefore, if this rejection is maintained, Applicants respectfully request that document(s) be provided as support.

For at least these reasons, the cited art fails to teach or suggest "simulating an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment," as recited in claim 1.

Therefore, claim 1 is patentable over the cited art, and the rejection should be overturned. Dependent claims 2-9 contain all the features of allowable independent claim 1. For at least this reason, the rejection of claims 2-9 should also be overturned. Additionally and notwithstanding the foregoing reasons for allowability of claims 2-9, these claims recite further features and/or combinations of features (as is apparent by examination of the claims themselves) that are patentably distinct from the cited art of record. Accordingly, the rejections to these claims should be overturned.

B. Applicants' Claim 10

As provided in independent claim 10, Applicants claim:

A recordable medium having recorded thereon computer readable code, wherein the computer readable code is adapted to:

simulate activities of the plurality of creatures at a first mode of simulation observable by a user, ***wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation; and***



***simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment.***

(Emphasis added).

Applicants respectfully submit that independent claim 10 is allowable for at least the reason that *Barba* in view of Examiner's Official Notice does not disclose, teach, or suggest at least "simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment," as emphasized above.

The Office Action issued September 12, 2007 contends that Fig. 7-17 as seen on page 130 of *Barda* shows the outside of a house simulation which is less detailed and less computationally intensive than figures showing the inside of the house as seen in Fig. 7-12 or Fig. 7-14 on pages 127-128. On this point, Applicants respectfully note that the house is not experiencing a change in environment or in response to a change, a simulation of an activity of the house is not performed at a higher level of detail and computational intensity. Further, *Barda* does not disclose that the results of the simulation of a higher level of detail are used to simulate the house at a lower level of detail for the new change in environment. Rather, *Barda* arguably shows an exterior of a house being shown at a low level of detail and an interior of the house being shown at a high level of detail.

The Office Action also mentions the existence of games such as *Starcraft* by Blizzard (released in February 28, 1998) and seems to take Official Notice that it is well known to simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment and wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation. Here, the games use a mini-map providing an overview of a location of space vehicle in relation to its distant surroundings, where a main display segment shows the space vehicle in relation to its immediate surroundings. The main display segment is allegedly shown in higher detail than the mini-map display. As such, *Starcraft* fails to use results from one mode of simulation to provide a simulation in another mode, since both simulations run concurrently. Further, *Starcraft* shows a simulation of an object at a lower resolution in a distant view before the object is shown at a higher simulation in the main display segment. Therefore, even if results of one simulation depended on the other, in *Starcraft*, a result from a high-detailed simulation would not be used to produce a lower-detailed simulation.

Per MPEP 2144.03(A), "It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known." Also, per MPEP 2144.03(B), "If such notice is taken, the basis for such reasoning must be set forth explicitly. The Examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her

conclusion of common knowledge." For at least the reasons stated above, it has not been shown that it is well known to simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment and wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation.

As specific factual findings predicated on sound technical and scientific reasoning in support of the conclusion of common knowledge are not provided in the Office Action, the Official Notice and the rejections based upon this finding should be withdrawn. Further, under 37 CFR § 1.104(d)(2), if the rejections are based on facts within the personal knowledge of the examiner, "the data should be stated as specifically as possible, and the facts must be supported, when called for by the applicant, by an affidavit from the examiner. Such an affidavit is subject to contradiction or explanation by the affidavits of the applicant and other persons." Therefore, if this rejection is maintained, Applicants respectfully request that document(s) be provided as support.

Accordingly, the cited art fails to teach or suggest to "simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment," as recited in claim 10.

Therefore, claim 10 is patentable over the cited art, and the rejection should be overturned.

C. Applicants' Claim 11

As provided in independent claim 11, Applicants claim:

A simulator device arranged to simulate the activities of a plurality of creatures, the device being arranged to utilise at least two modes of simulation: a first mode arranged to:

simulate activities of the plurality of creatures at a first mode of simulation observable by a user, ***wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation; and***

***simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment.***

(Emphasis added).

Applicants respectfully submit that independent claim 11 is allowable for at least the reason that *Barba* in view of Examiner's Official Notice does not disclose, teach, or suggest at least "simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment," as emphasized above.

The Office Action issued September 12, 2007 contends that Fig. 7-17 as seen on page 130 of *Barda* shows the outside of a house simulation which is less detailed and less computationally intensive than figures showing the inside of the house as seen in Fig. 7-12 or Fig. 7-14 on pages 127-128. On this point, Applicants respectfully note that

the house is not experiencing a change in environment or in response to a change, a simulation of an activity of the house is not performed at a higher level of detail and computational intensity. Further, *Barda* does not disclose that the results of the simulation of a higher level of detail are used to simulate the house at a lower level of detail for the new change in environment. Rather, *Barda* arguably shows an exterior of a house being shown at a low level of detail and an interior of the house being shown at a high level of detail.

The Office Action also mentions the existence of games such as *Starcraft* by Blizzard (released in February 28, 1998) and seems to take Official Notice that it is well known to simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment and wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation. Here, the games use a mini-map providing an overview of a location of space vehicle in relation to its distant surroundings, where a main display segment shows the space vehicle in relation to its immediate surroundings. The main display segment is allegedly shown in higher detail than the mini-map display. As such, *Starcraft* fails to use results from one mode of simulation to provide a simulation in another mode, since both simulations run concurrently. Further, *Starcraft* shows a simulation of an object at a lower resolution in a distant view before the object is shown at a higher simulation in the main display segment. Therefore, even if results of one

simulation depended on the other, in *Starcraft*, a result from a high-detailed simulation would not be used to produce a lower-detailed simulation.

Per MPEP 2144.03(A), "It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known." Also, per MPEP 2144.03(B), "If such notice is taken, the basis for such reasoning must be set forth explicitly. The Examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge." For at least the reasons stated above, it has not been shown that it is well known to simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment and wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation.

As specific factual findings predicated on sound technical and scientific reasoning in support of the conclusion of common knowledge are not provided in the Office Action, the Official Notice and the rejections based upon this finding should be withdrawn. Further, under 37 CFR § 1.104(d)(2), if the rejections are based on facts within the personal knowledge of the examiner, "the data should be stated as specifically as possible, and the facts must be supported, when called for by the applicant, by an affidavit from the examiner. Such an affidavit is subject to contradiction or explanation by the affidavits of the applicant and other persons." Therefore, if this

rejection is maintained, Applicants respectfully request that document(s) be provided as support.

Accordingly, the cited art fails to teach or suggest to "simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment" and "wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation," as recited in claim 11.

Therefore, claim 11 is patentable over the cited art, and the rejection should be overturned.

### **III. Conclusion**

In summary, it is Applicants' position that Applicants' claims are patentable over the applied cited art references and that the rejection of these claims should be overturned. Appellant therefore respectfully requests that the Board of Appeals overturn the Examiner's rejection and allow Applicants' pending claims.

Respectfully submitted,

By:

  
Charles W. Griggs  
Registration No. 47,283

**Claims Appendix under 37 C.F.R. § 41.37(c)(1)(viii)**

The following are the claims that are involved in this Appeal.

1. A method of simulating the activities of a plurality of creatures, the method comprising:

simulating activities of the plurality of creatures at a first mode of simulation observable by a user, wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation; and

simulating an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation.

2. A method as claimed in claim 1, wherein said second mode of simulation is utilised when one or more of said plurality of creatures simulated by said first mode is undergoing a change in environment, the second mode being utilised to simulate the activity of said one or more of said plurality of creatures undergoing the change in environment.



3. A method as claimed in claim 2, wherein said change in environment comprises a creature undergoing at least one of: fighting; mating; eating; interacting with another creature; reproducing; sensing another creature; encountering another creature; moving to a new terrain type; and altering the environment.

4. A method as claimed in claim 1, wherein the second mode is invoked at the start of the simulation so as to determine starting parameters of each creature.

5. A method as claimed in claim 1, wherein said second mode is utilised to determine at least one parameter affecting the activity of the simulated creature, said parameter being subsequently utilised by the first mode of simulation.

6. A method as claimed in claim 1, wherein when the method changes from utilising the second mode to the first mode, at least one parameter relating to said creature simulated by the second mode is stored for use by a later iteration of the second mode.

7. A method as claimed in claim 4, wherein said parameter comprises at least one of creature mass; creature energy; creature strength; creature behaviour transition probabilities; creature biochemical levels; creature movement parameters; creature speed; and creature rate of turn.

8. A method as claimed in claim 5, wherein said parameter comprises at least one of creature mass; creature energy; creature strength; creature behaviour transition probabilities; creature biochemical levels; creature movement parameters; creature speed; and creature rate of turn.

9. A method as claimed in claim 6, wherein said parameter comprises at least one of creature mass; creature energy; creature strength; creature behaviour transition probabilities; creature biochemical levels; creature movement parameters; creature speed; and creature rate of turn.

10. A recordable medium having recorded thereon computer readable code, wherein the computer readable code is adapted to:

simulate activities of a plurality of creatures at a first mode of simulation observable by a user, wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation; and

simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment.

11. A simulator device arranged to simulate activities of a plurality of creatures, the device being arranged to utilise at least two modes of simulation, the two modes of simulation comprising:

a first mode of simulation arranged to simulate activities of the plurality of creatures observable by a user, wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation; and

the second mode of simulation arranged to simulate an activity of one of the plurality of creatures observable by the user, wherein results at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for a new change in environment.

**Evidence Appendix under 37 C.F.R. § 41.37(c)(1)(ix)**

There is no extrinsic evidence to be considered in this Appeal. Therefore, no evidence is presented in this Appendix.

**Related Proceedings Appendix under 37 C.F.R. § 41.37(c)(1)(x)**

There are no related proceedings to be considered in this Appeal. Therefore, no such proceedings are identified in this Appendix.